

WHAT IS CLAIMED IS:

1. A method, comprising:

transmitting over a packet data network information pertaining to an incoming call indicative of telephony monitoring and control functions to a first call processing device being located separately from any of at least two nodes of the packet data network;

routing the incoming call to connect to a selected endpoint of the packet data network according to established rules;

notifying a second call processing device regarding the incoming call routing;

arranging through the second call processing device for a telephone communications session between the at least two nodes of the packet data network;

causing the telephone communications session between the at least two nodes of the packet data network to occur; and providing to a user information relating to the caller.

2. The method of claim 1, further comprising:

determining the subject matter of the incoming call and obtaining information relating to that subject matter; and

displaying information relating to the caller and to the subject matter of the incoming call.

3. The method of claim 2, further comprising enabling a user to access additional information relating to the caller and/or the incoming call.

4. The method of claim 1, further comprising utilizing indicia of the initiating caller to identify the caller.
- 5 5. The method of claim 4, wherein utilizing indicia of the initiating caller comprises utilizing the caller's telephone number to identify the caller.
6. The method of claim 2, wherein displaying information comprises displaying information on a monitor or other display device that is accessible to a user.
- 10 7. A method, comprising:
routing an incoming call through a gatekeeper to connect to a selected endpoint of a packet data network according to established rules;
15 informing an application computer the identity of the incoming caller;
providing to a user information relating to the incoming caller; and
causing the packetized telephone communications session between at least two nodes of the packet data network to occur.
- 20 8. The method of claim 7, further comprising:
determining the subject matter of the incoming call and obtaining information relating to that subject matter; and
displaying information relating to the caller and to the subject matter.
- 25 9. The method of claim 8, further comprising enabling a user to access

additional information relating to the caller and/or the subject matter.

10. The method of claim 7, further comprising utilizing indicia from the incoming call to identify the caller.

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11. The method of claim 10, utilizing the caller's telephone number to identify the caller.

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12. The method of claim 7, displaying information on a monitor or the like that is accessible to a user.

13. The method of claim 7, further comprising obtaining information from the incoming caller and providing the obtained information to a user.

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14. The method of claim 13, further comprising:
assigning an identifier for the incoming call; and
caching the incoming call in combination with the obtained information and the call identifier for later retrieval.

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15. The method of claim 14, further comprising:
retrieving and forwarding the incoming call and the obtained information to a user.

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16. A method, comprising:
establishing rules, relative to a communications session, for routing an

incoming call in a first call processing device;

transmitting information indicative of telephony monitoring and control functions to the first call processing device located separately from any of at least two nodes of a packet data network;

5 transmitting a routing request from a second call processing device to the first call processing device;

routing the incoming call to connect to a selected endpoint of a packet data network;

notifying an application computer regarding the incoming caller's identification;

10 arranging for the telephone communications session between at least two nodes of the packet data network; and

providing to a recipient of the incoming call information relating to the caller.

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17. The method of claim 16, further comprising:

determining the subject matter of the incoming call and obtaining information relating to that subject matter; and

displaying information relating to the caller and to the subject matter.

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18. The method of claim 16, further comprising:

obtaining information from the incoming caller; and

providing the obtained information to a user.

25 19. The method of claim 18, further comprising:

assigning an identifier for the incoming call; and
caching the incoming call in combination with the obtained information
and the call identifier for later retrieval.

5 20. The method of claim 19, further comprising retrieving and forwarding
the incoming call and the obtained information to a user.

21. An article or set of articles comprising a computer readable medium
having instructions stored thereon which when executed causes:
10 transmitting over a packet data network information pertaining to an
incoming call indicative of telephony monitoring and control functions to
a first call processing device being located separately from any of at
least two nodes of the packet data network;
routing the incoming call to connect to a selected endpoint of the
15 packet data network according to established rules;
notifying a second call processing device regarding the incoming call
routing;
arranging through the second call processing device for a telephone
communications session between the at least two nodes of the packet
20 data network;
causing the telephone communications session between the at least
two nodes of the packet data network to occur; and
providing to a user information relating to the caller.

25 22. The article or set of articles of claim 21 wherein said instructions also

cause, when executed, the assignment of an identifier to an incoming call and the caching of the incoming call in combination with the information and the call identifier for later retrieval.

5 23. The article or set of articles of claim 22 wherein information regarding a subject matter associated with said incoming call is extracted from said incoming call and utilized to access further information regarding said subject matter.

10 24. An article or set of articles comprising a computer readable medium having instructions stored thereon which when executed causes:
routing an incoming call through a gatekeeper to connect to a selected endpoint of a packet data network according to established rules;
informing an application computer of an identity of an incoming caller;
15 providing to a user information relating to the incoming caller; and
causing the packetized telephone communications session between at least two nodes of the packet data network to occur.

20 25. The article or set of articles of claim 24 wherein the instructions also cause information regarding subject matter of the incoming call to be obtained and displayed.

[ADDITIONAL CLAIMS FOR 24/3X4 – SCREEN POP]

25 26. Apparatus comprising:

an applications computer to provide a user information relating to the incoming caller of telephone calls transmitted over a packet-switched data network under its control; and

a gatekeeper to establish telephone calls over the packet-switched data network, and to receive instructions from, and send messages to, the applications computer, said messages indicating at least the identity of

an incoming caller.

27. The apparatus of claim 26 wherein plural applications computers are configured to issue instructions to a single gatekeeper.

28. The apparatus of claim 27, wherein the gatekeeper establishes the telephone calls between at least two endpoints in the data network.

29. The apparatus of claim 28, wherein the applications computer is arranged to extract additional information from the caller, and to present this information to a user.

30. The apparatus of claim 29, where the information is presented to a user via a monitor or other display device.

31. The apparatus of claim 30, wherein the applications computer is further arranged to communicate with the caller and the user via voice recognition and voice synthesis techniques.

32. The apparatus of claim 31, wherein the user is a called party.

33. The apparatus of claim 32, wherein said applications computer is
5 configured to instruct a gatekeeper to initiate a call, and to await a
message from said gatekeeper to complete the call.

34. The apparatus of claim 33, wherein the gatekeeper is programmed to
inform the applications computer when information regarding the
10 identity of the calling party is acquired.

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